

setarum capillarium non exsertilium includente et duabus ventralibus absque setis.

Segmentum duodecimum et omnia sequentia (quorum numerus fere 130–140) subteretia, anteriora longa sensimque posterius breviora, pinna dorsali conica vel subcylindrica apice globoso et fasciculo setarum capillarium instructa, ventrali duplici ut in segmento 10mo et 11mo, et absque setis.

Animal in tubo inclusum erecto, longissimo, cylindrico, pergamentaceo, tenuissime transverse sulcato seu annulato, extremitate inferiore affixo.

*Spiochætopterus typicus*, Sars. Unica species (pp. 7–8).

The remarkable genus *Chætopterus*, Cuvier, has hitherto occupied an isolated position amongst the other Annelides. Audouin and Milne-Edwards in 1833 established it as a distinct family (*Chætopterea*), and their example has been followed by all subsequent authors. But there has always been a doubt as to its true place in the system and its affinities with other Annelides. The above-mentioned French zoologists even thought that it would be most natural to form a distinct order for this animal, but they placed it, evidently incorrectly, between *Peripatus* and *Arenicola*. Grube (in 1850) was not more fortunate in placing it between *Siphonostomum* and *Arenicola*. Lastly, R. Leuckart (in 1849) was the only person who prognosticated the family to which the genus *Chætopterus* should belong, namely the *Ariciea*.

This new animal forms a remarkable connexion between *Chætopterus* and *Spio*. It has only been taken at Helle, in the neighbourhood of Manger, near Bergen, in mud at a depth of 40–50 fathoms in company with *Virgularia mirabilis*, Müll.—*Fauna littoralis Norvegiæ*, Second part, 1856, pp. 1–8.

*On the Sea Sawdust of the Pacific.* By JOHN DENIS MACDONALD, Esq., Assistant Surgeon R.N.

The Author gives a description of the remarkable little Alga so frequently met with in the South Pacific, scattered over the surface of the water in broad streaks and patches of a pale yellowish-brown tint, and which is known under the name of "Sea Saw-dust."

After adverting to the occurrence of a similar phænomenon in other parts of the globe, and citing the account given of the *Trichodesmium erythræum* of the Red Sea by MM. Evernor Dupont and Montagne, together with a description extracted from the 'Colombo Herald' of May 14, 1844, of what was obviously an example of a vegetable scum of the same kind occurring on the sea off Ceylon, the author remarks, that in the instances met with by himself he did not recognize the fœtid odour so generally and pointedly spoken of in the accounts of others. He then states the results of his own observation as follows:—

"It was rather difficult at first to determine whether our species is to be referred to the Oscillatoridæ or the Confervidæ. In the latter,

a linear series of tubular cells compose the filaments, which are thus said to be jointed; but in the former, although the filaments are tubular, simple and continuous without actual joints, a pseudo-jointed appearance is presented by the apposition of the little masses of contained colouring matter. Notwithstanding, having submitted the 'sea saw-dust' of the Pacific to microscopic examination on several occasions, I was much inclined to believe that the filaments were actually jointed; and this view is supported by the circumstance that an empty tubule, or one in which the parietes may be traced continuously without being interrupted by joints or internal septa, has never fallen under our notice; besides which the filaments are exceedingly brittle, usually suffering cleavage in the transverse direction. It, however, undoubtedly belongs to the *Oscillatoridæ*.

"When the filaments are first removed from the water, they may be observed adhering side by side in little bundles or fasciculi; and besides the colouring matter, the little cells, or at least the intervals between the septa, contain globules of air, which sufficiently account for their buoyancy; and, moreover, in this respect, although their abiding place is the open ocean, their habit can scarcely be regarded as very different from that of those species which flourish in damp localities exposed to the atmosphere.

"The filaments are all very short compared with their diameter, with rounded extremities; and when immersed some little time in fluid so that the contained air-bubbles make their escape or are taken up, the pale colouring matter appears to fill the cells completely, and a central portion, a little darker than the rest, may be distinctly perceived in each compartment intersected by a very delicate transverse partition.

"We have found this species off the coast of Australia and in Moreton Bay, amongst the Polynesian Islands, and on two separate occasions off the Loyalty Group, in nearly the same geographical position."—*Royal Soc. Proc.* Feb. 26, 1857.

#### OBITUARY NOTICE.—DR. ROBERT BALL OF DUBLIN.

Our readers will regret to hear of the decease of this eminent Irish zoologist, which took place suddenly at his residence in Dublin on the 30th of March, in consequence of a rupture of the aorta. Dr. Ball has for many years been one of the chief students of zoology in Ireland, and although his published writings are not numerous, the frequent references to his observations to be found in the works of our principal writers on British animals, bear witness to his industry and the amount of his information.

Dr. Ball held several posts in Dublin, but he was best known to naturalists as Director of the Museum in Trinity College and Secretary to the Zoological Society of Dublin, of which he was the principal supporter. He was born at Cove, county Cork, in April 1802, so that at the time of his death he was scarcely fifty-five, and as his faculties were still in their full vigour, he has left a blank in the ranks of Irish naturalists which will not easily be supplied.